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| 09/978,144   | 10/15/2001  | Scott A. Rosenberg   | 03-380              | 4095             |
| 20306 7590 06/11/2009<br>MCDONNELL BOEHNNEN HULBERT & BERGHOFF LLP<br>300 S. WACKER DRIVE<br>32ND FLOOR<br>CHICAGO, IL 60606 |             |                      |                     |                  |
| EXAMINER<br>CARLSON, JEFFREY D   |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/978,144

**Applicant(s)**

ROSENBERG ET AL.

**Examiner**

Jeffrey D. Carlson

**Art Unit**

3622

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 7, 8, 11-15, 17-21, 23, 31, 38, 39, 61-63, 68-75, 78-81 and 84-89 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 8, 11-15, 17-21, 23, 31, 38, 39, 61-63, 68-75, 78-81 and 84-89 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/19/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is responsive to the paper(s) filed 10/15/2008.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3, 5, 7-8, 11-15, 17-21, 23, 38, 61-63, 68-75, 78-81 and 84-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering (US20020083439) in view of Marsh et al (US5848397).

Regarding claims 1-3, 8, 38, 74-75, 78, 79, Eldering teaches personal video recorders (PVRs) that include local hard drive storage for received ads [0013, 0014]. The local device includes an ad processing unit which determines the ad queue/order and inserts the ads into available ad opportunities (avails) upon request for an ad [0015, 0046]. More importantly, the ad processing unit also re-orders the ad queue upon

certain parameters such as a channel change (i.e. a context change) by the viewer [0016]. This enables the newly re-ordered queue to best target the viewer [0018]. The channel change can be taken to represent a global context parameter. The ad queue/order is taken to be a "data structure". In order to accomplish this targeting, Eldering receives not only advertising content from a server, but also each advertisement's targeting metadata [¶ 0074]. Both the ad content and the ad metadata is then stored locally so that the real-time ad queue re-ordering can be accomplished by the client programmed with such a capability [¶ 0015]. Eldering provides metadata associated with each stored advertisement so that ads appropriate to the current context (viewer, channel, program type, time, etc) can be put towards the top of the queue [¶ 0032, 0034, 0051, 0053, 0054, 0063, 0065-0067]. In particular however to the "checking to determine if the updated parameter is a trigger parameter", Eldering teaches that certain parameter changes may in some cases not represent trigger parameters – changing from "60 minutes" to "Dateline" may in some cases not trigger re-ordering of the ad queue since the programs are both of the same program type, "news shows" [¶ 0060]. This exemplifies the concept that the ad metadata can specify show types and that detected changes in shows within the same show type are not (in this example) trigger parameters. Of course, depending on the advertiser-specified metadata, other parameter changes are indeed trigger parameters. This collection of targeting metadata for each ad is taken to represent the claimed "ad control files" whereby each targeting parameter of Eldering relates to the claimed trigger parameters. It would have been obvious to one of ordinary skill at the time of the invention to have

received and stored newly released batches of advertising content and corresponding metadata and to have added them to the pre-existing collection so that new advertising for newly released products can be launched alongside ongoing ad campaigns; this obvious accumulation of targeting parameters is synonymous with a trigger table as claimed. Eldering does not appear to teach a weighted placement value for an ad derived by a product of a re-determined placement value and the ad's weight value whereby the ad's weight value is based upon the ad control file's weight rule which includes an equation for proportionate weight value increase as time passes. Marsh et al also teaches methods and systems for determining a sorted queue of ads to be used to display on-screen advertising to a user. In particular, Marsh et al teaches that a server can deliver the advertising content as well as the metadata ("ad control information") such as expiration, maximum user impressions, etc.) needed for the client to determine queue sorting and advertisement placement [8:47-63]. One of the aspects deemed important to advertisement sorting and display is sorting the queue based on "time since last seen" (tsls) as well as (advertiser-specified) criteria for each ad, namely a pre-defined weights such as  $c2 = TSLS\_WEIGHT$ . These are used in a typical equation which multiplies terms with coefficients [10:30-53] to determine a queue order of ads. The ads can then be displayed in accordance with the queue. It would have been obvious to one of ordinary skill at the time of the invention to have borrowed the time-dependant concepts from Marsh et al and implemented them with the continually re-ordered advertising queue of Eldering's PVR's ad processing unit so as to enable advertisers to specify equations using particular time-based elements/coefficients,

thereby offering the customized ability to prioritize particular ads according to time passed since it was last seen.

Regarding claims 5, 11, 13, 15, 62, 63, Eldering teaches that the ad queue is a stacked list of ARLs (ad resource locators) that point to the stored locations for each ad in the queue. The next ad to be played is placed on the top of the heap/stack. [fig 3, fig 6, 0032, 0049].

Regarding claim 7, the automated re-ordering of the ads triggered by a channel change is taken to represent interpreted rules that are programmed in to the ad selection software.

Regarding claim 14, Eldering teaches that each ad can include various targeting parameters such as time of day, program being watched, identified viewer, etc [fig 5, fig 6, 0081]. The re-ordering of the ad queue according to matched parameters is taken to represent re-ordering a placement value according to a weight value for the ads and their parameters. The ads on the top of the new queue are taken to have higher weighted ad placement values.

Regarding claim 12, Eldering shuffles the ad queue in real-time in advance of the ad insertion requests and therefore accomplishes these tasks asynchronously.

Regarding claims 17-19, the ads of Eldering may be inserted into predefined commercial breaks as conventional full page ads. However, Eldering also teaches that ads may be presented in association with electronic program guides (EPGs); these ads are taken to represent banner ads in predetermined locations on screen [0027].

Regarding claims 20-21, any of the metadata can be taken to represent the broadly stated placement rule, local parameter value, weight rule and trigger rule.

Regarding claims 23, 72, Marsh et al teaches the use of ad campaign expiration dates as part of his ad control information. It would have been obvious to one of ordinary skill at the time of the invention to have included the expiration capabilities with the system of Eldering in order to keep the advertising fresh, timely and relevant for the advertisers and viewers.

Regarding claim 61, the system of Eldering is taken to include modules programmed to accomplish its function which integrates with the other programmed modules. The modules can be taken to be cooperating applications.

Regarding claim 68, Eldering teaches that a newly detected targeting parameter such as channel='romance channel' causes a plurality of ads to be selected as relevant – Macy's ad, DeBeers ad, Ford Taurus ad, etc. [¶ 0063].

Regarding claim 69, Eldering teaches that targeting (triggering) can be done in accordance with time [¶ 0077].

Regarding claim 70, one of ordinary skill would find it obvious to use any well known and convenient data format in order to provide a schema for representing/structuring the metadata. XML is a well known system for defining data formats and it would have been obvious to one of ordinary skill at the time of the invention to have used XML to represent the metadata of Eldering. Further, applicant indicates that the particular selection of XML as the format is not critical – “The example

is encoded in XML format, although any appropriate format will suffice" [applicant's PGPUB ¶ 0059].

Regarding claim 71, by their nature, Eldering's metadata (control files) encompassing the targeting parameters define a rule set for each associated ad.

Regarding claim 73, Eldering teaches logging the advertising history and reporting such data to a server [¶ 0048].

Regarding claims 80, 81, Marsh et al provides for constants to be used in determining ad order: priority constant: HIGH, MEDIUM, LOW, NO [8:49-54] as well as the use of constants in the equation [10:46] and expiration constants and maximum exposure constants [9:44-49].

Regarding claims 84-89, it is not clear if Marsh et al specifies a unit for his time elements. However Official Notice is taken that UNIX and other computer systems typically compare/measure time according to seconds passed with respect to the 1970-01-01 00:00:00 epoch as a frame of reference. It would have been obvious to one of ordinary skill at the time of the invention to have used any known time unit, including epoch seconds to determine and compare timestamps.

**5. Claims 31, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering in view of Merriman et al and Armstrong et al (US7017173).**

Regarding claims 31, 39, Eldering teaches ad opportunities peculiar to PVRs such as prepended ads, live shows, recorded shows, end of program ads, etc. Eldering does not appear however to teach inserting an ad upon the detection of a pause mode



of the PVR. Armstrong et al however teaches that an interactive video on demand system can insert a targeted ad upon detection of paused programming content [abstract]. It would have been obvious to one of ordinary skill at the time of the invention to have inserted an ad when a user of the system of Eldering enters a pause mode so as to enable additional advertising opportunities for advertisers.

### ***Response to Arguments***

6. Applicant's arguments are moot in view of the new grounds of rejection.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Cannnon US6286005 teaches details for optimizing display and rotation of advertising campaigns. He speaks of time-weighted frequency in order to maintain proper spacing between ad exposures [53:48-51].

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Carlson whose telephone number is 571-272-6716. The examiner can normally be reached on Monday-Fridays; off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571)272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey D. Carlson/  
Primary Examiner, Art Unit 3622

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